

IN THE SPECIFICATION:

Please amend the Specification of the above-identified application as follows.

Please amend the paragraph beginning on page 1, line 7 as follows.

--Water is the source of life, and is indispensable to our daily life. The water we use ~~in our daily life~~ comes from the a water source and is purified in waterworks, the purified water being then transported through a water duct to a water pressure-stabilizing water tower, where the water is branched to a water supply pipe network and goes to residential quarters for the daily use of inhabitants. The water pressure-stabilized water tower pressurizes the normally processed tap water and transports it to individual users. During ~~the~~ transportation, the obsolete water pipe network and the broken pipes will contaminate the tap water. It is very expensive and even impossible to totally avoid such contamination by digging the road to replace the obsolete pipes.--

Please amend the paragraph beginning on page 2, line 10 as follows.

--A water-purifying tank is disclosed in Chinese patent CN-95228447, which contains a filter and a float valve disposed within the tank. The lower end of the filter is attached ~~onto~~ to an automatic water amount-adjusting valve and is connected with the float through a float connecting rod to automatically control the drinking water amount and ~~make filter and purify~~ the drinking water filtered and purified.--

Please amend the paragraph beginning on page 3, line 7 as follows.

--The objectives of the invention are solved through a water supply system with pressure-stabilized water storage and quality-distinguished supply of service and potable water, ~~including~~ The system includes a multifunctional water supply tank with pressure-stabilized water storage and quality-distinguished supply of service and potable water, ~~which contains~~ containing a service water storage room with a water inlet and a water outlet, a potable water storage room ~~communicated~~ in communication with the service water storage room and containing purifying agents, a potable water outlet, and a water outlet ~~communicated~~ in communication with a solar water heater, ~~at~~ At least one filtering cylinder assembly ~~communicated~~ is in communication with the potable water outlet through pipes being disposed outside the water supply tank with functions of magnetizing, fine filtering, water softening, ~~microelements~~ increasing and reducing microelements, absorption, and super-filtering, etc.; The system further includes a pipe valve, which is made of non-secondary-contamination material and is matched with ~~at~~ the filtering cylinder assembly, and an instrument forming the purified potable water supply network mountable to users, and a pure water filter assembly outlet piping network instrument being added thereafter for high-standard industrial pure water processing and seawater desalination. The wastewater drained from the system can be recycled after being purified into neutral water.--

Please amend the paragraph beginning on page 4, line 1 as follows.

--The multifunctional water supply tank with pressure-stabilized water storage and quality-distinguished supply of service and potable water and the purifying device and solar water heater of the water supply system with pressure-stabilized water storage and quality-distinguished supply of service and potable water according to the present invention can be located separately on a building's roof or ground in accordance with the building's height matched with the reachable height of the piping network water supply pressure. The equipment can be mounted in a way of either single function or multifunction. ~~Their~~The under-pressure water supply is provided by an automatic frequency-converting pump, and the on-off operation of the system's water supply is automatically controlled by a central console.--

Please amend the paragraph beginning on page 4, line 11 as follows.

--The multifunctional water supply tank with pressure-stabilized water storage and quality-distinguished supply of service and potable water according to the present invention includes a service water storage room with a water inlet and a water outlet, a potable water storage room ~~communicating~~in communication with the service water storage room and containing purifying agents, a potable water outlet, and a water outlet communicating with a solar water heater. The ~~existed~~existing tap water piping network is ~~communicated~~in communication with the outlet of the potable water storage room, connecting the potable water outlet with household water purifiers and systems so

that they cannot be stopped and are convenient to use. Alternately, it is possible to connect at the outlet of the potable water storage room via pipes at least one set of filtering cylinder ~~assembly~~assemblies and a (quality-distinguished) potable and service water supply piping network which is formed by non-secondary-contamination material and related instruments and is matched with the filtering cylinder assembly and a set of high-power solar water ~~heater~~heaters as well as a hot water storage pot., ~~such that the~~ The service water and the purified potable water as well as the pure water and the solar heated water can be separated and charged individually, making clear the difference between the potable water charges and the charges by the waterworks, and ensuring the realization of a quality-distinguished potable and service water supply system.--

Please amend the paragraph beginning on page 6, line 6 as follows.

--A sewage draining valve is individually disposed at the bottom of the service water storage room and that of the potable water storage room, and the drained sewage is collected in a sewage pool and a cleansing pool where it is deposited and filtered into neutral water which is then collected into a neutral water storage tank connected with an underground neutral water pool for recycling.--

Please amend the paragraph beginning on page 6, line 16 as follows.

--The wall, cover and the outlet pipes connected with the water outlet of the water supply tank are individually made of successively-connected light steel plate, wire-

net and concrete, or an inner wall stainless steel with a micro electrically-heated layer and a temperature-preserving foam concrete as well as a foam plastic temperature-preserving layer. The micro electrically-heated layer is composed of a 36V DZR micro heating film or plate and an isolating film, keeping the water temperature within 5-23°C, and is automatically switched by a connected temperature-sensitive wire and a temperature-controlling relay to prevent from freezing and preserve the heat. In the northern part of China, it is necessary to heat to prevent freezing, whereas in the south, only the functions such as heat-preservation, sunshine-proof and anticorrosion are required.--

Please amend the paragraph beginning on page 7, line 9 as follows.

--The water supply tank according to the present invention can be mounted on roofs, and can thus operate by use of water potential energy to save energy consumption. For low-~~storey~~storey buildings with sufficient water pressure, the water supply tank can be located in a ground floor room and utilizes the water pressure to transport the water to individual users. It is also possible to install the water supply tank, the water purifying device and the solar water heater on building roofs or ground floors separately and in ways of single function or multi functions according to different requirements. In the case of insufficient sunshine, an electrical water heater installed at the rear of the household hot water meter can be used to make up for the shortage of hot water.--

Please amend the paragraph beginning on page 7, line 18 as follows.

--Referring now to Figs. 1 and 7, the multifunctional water supply tank with pressure-stabilized water storage and quality-distinguished supply of service and potable water is connected with an urban water supply piping network, switched on automatically by a float switch valve and ~~enters~~entering into the water storage room, supplying water in 4 pipes, (the neutral water and the neutral water storage tank operating independently), ~~that is,~~--

Please amend the paragraph beginning on page 8, line 1 as follows.

--For potable water, as shown in Fig. 7, the water goes through ~~2~~two sets of large-capacity water purifying and filtering cylinder ~~assembly~~assemblies (with one spare purifying and filtering cylinder assembly), a sewage draining pool, a cleansing pool, and a water supply main pipe into a unit water supply branch pipe, where it enters into a household water supply pipe and goes through a water meter, a potable water pipe and valves for drinking. For ~~the buildings that are difficult to be reconstructed~~reconstruct ~~into the buildings~~ with independent household water supply services, it is possible to establish a central water sales station using the system of the invention, providing sporadically pure water and electrically-heated hot water.--

Please amend the paragraph beginning on page 9, line 4 as follows.

--For industrial pure water, a pure water filter assembly and a water supply network instrument are arranged behind the potable water-piping network at the utilization location for ~~proving~~providing high-standard industrial pure water. The system can also provide the function of seawater desalination.--

Please amend the paragraph beginning on page 9, line 8 as follows.

--For neutral water, the sewage drained from the system is purified into neutral water which is then stored in an independent neutral water tank,~~the~~. The neutral water is then communicated with the neutral water, a water which is formed of roof rainwater, ground surface rainwater and life sewage collected and processed up to the standard by a sewage collecting pool whose base part is arranged underground, to be recycled for ~~toilet~~toilet flushing, flower watering, outdoors cleaning, and residential quarters landscaping. The residual neutral water can be directly drained into rivers and lakes, and underground water-containing layers. The concentrated feculences ~~remained~~remaining after the processing will be collected and transported to a suburb refuse dump, where they are further processed to become fertilizers.--

Please amend the paragraph beginning on page 10, line 1 as follows.

--With the above-mentioned water supply system, it is possible to reconstruct the unitary residential building and building groups, and the system can be installed directly in the residential quarters both already constructed and newly planned

with the only requirement that the water consumption amount be designed in a calculable basis and be arranged systematically. The clear relationship between the quality-distinguished water supply operation management and the operation management of the city tap water company ensures that the water income of the city tap water won't be harmed. The timely cleansing and the maintaining of the water quality is managed by special persons from the specialized water-cleaning engineering company, and each household water meter will be checked and the water consumption charged, ensuring a return of the investment and a long-term water supply operation. Thus, the water-drinking problem of the urban inhabitants can be solved easily under the circumstances of no investment from the state, and people have cheap, fresh and clean magnetized potable water without the damage of the elements contained in water. The price of the water is much lower than that sold on the market, ~~saving thus evidently~~ preserving the water and promoting the sanitation of water drinking and people's health. The present system ~~according to the invention~~ is easy to install and does not require the reconstruction of the old urban water supply network. Cost for the engineering equipment installation is quite ~~lower~~ low at about 1800 yuan(U.S.\$233)/household (for purified water).--

Please amend the paragraph beginning on page 10, line 20 as follows.

--The water supply system with pressure-stabilized water storage and quality-distinguished supply of service and potable water according to the present invention can ensure a sustainable use of water resource, and becomes therefore a

feasible means for speeding up the reforms of water drinking and utilization in our country. The water supply system with pressure-stabilized water storage and quality-distinguished supply of service and potable water according to the present invention connects the urban tap water pipes with the automatically-switched pressure-stabilized water storage tank for potable and service water on the building roof, and is then connected in two ways ~~into~~ to the large-capacity water purifying system with service water pipe and potable and pure water pipe, ~~where~~ From there, the water is transported to individual residential household and industrial water meters through pipes and equipment made of non-contaminated new materials.--

Please amend the paragraph beginning on page 11, line 9 as follows.

--The water supply tank and system according to the present invention can solve the problems of insufficient tap water pressure and the quality-distinguished water supply as well as the water purification of the contaminated water after going through the water piping network. The potable water, service water, and the solar heated water are made to flow separately and are utilized economically, resulting in a drastic saving in water resource and energy, ensuring a safe and sanitary drinking water and promoting people's health. The system according to the invention can be constructed rapidly, without the necessity in breaking ground and paving new pipe networks, thus casting little negative influence, requiring only lower costs and saving the investment with very good processing effects and economical and social profits, ~~and being~~ Further, the present

invention is suitable to the reconstruction of the present urban water supply network to improve the quality of drinking water.--

Please amend the paragraph beginning on page 11, line 21 as follows.

--For the recycling of the neutral water according to the invention, ~~it is to select a suitable area~~ is selected in the residential quarters for constructing a neutral water collecting pool for sewage and rainwater. The second underground layer of the pool body consists of a neutral water collecting pool and a neutral water processing room. The first underground layer of the pool body consists of a pool for collecting, processing and depositing rainwater and a pool for collecting, biochemical processing and depositing life sewage. The ground surface serves as a parking lot or lawn. The roof rainwater, ground surface rainwater and life sewage of the residential quarters are collected and flow into the rainwater pool and the sewage pool respectively, ~~the~~ The sewage, after being processed biochemically and deposited, flows into a buffer pool and is again deposited and filtered there. The respectively-processed water becomes ~~the~~ up-to-standard neutral water after being filtered and separated once again and flows then into the individual neutral water storage pools where the neutral water, according to requirements, is pumped into a neutral water tank by a frequency-converting pump and enters the piping network, or it enters the neutral water pipe and serves as the recycled water for ~~toilettoilet~~ toilet flushing, flower watering and residential quarters landscaping, ~~the~~ The residual neutral water ~~being able to be~~ is drained directly into rivers and lakes and the

underground water-containing layers. The concentrated feculences ~~remained~~remaining after the processing will be sucked by a pump into a ~~de~~refuse truck and ~~are~~ transported to a suburb refuse dump, where they are further processed to become fertilizers.--

Please amend the paragraph beginning on page 12, line 19 as follows.

--~~The life~~Residential sewage contains relatively simple components and is easy to process. The sewage and the rainwater can be processed locally, changing ~~thus~~ the processing in a large processing plant into a mode of segmented processing and resulting in a saving in capital investment and reduced processing costs as well as an expedient localized water recycling and an economized utilization of water resource. The up-to-standard water of Grades II and III are then drained directly into rivers and lakes, ensuring ~~the clearness~~clarity of river water and increasing water amount, and is therefore beneficial to ~~the~~ water recycling in downstream areas. For areas with no rivers and lakes, deep wells can be used to drain the water into water-containing underground layers to ~~make up the~~replenish underground water, forming a ~~big~~large scale circulation of economized water resource utilization.--

Please amend the paragraph beginning on page 13, line 7 as follows.

--The invention can solve the problem of insufficient tap water pressure and the-secondary contamination in the water piping network, distinguishing between the service water, the-purified potable water, the-solar heated water, the-recycled neutral water and the-liferesidential sewage.--

Please amend the paragraph beginning on page 13, line 11 as follows.

--The invention will now be further described and explained in accordance with the accompanied figures,~~in which~~--

Please amend the paragraph beginning on page 14, line 16 as follows.

--The first embodiment of the present invention is referred to in Figs. 1-6.
A water supply tank 1 is composed of a service water storage room 4, which contains a water inlet 2 and a water outlet 3, and a potable water storage room 5. A float-type automatic switch valve 6 is arranged at the inlet 2 within the service water storage room 4. The water supply tank 1 has an inlet on its upper part, which is ~~communicated in~~ communication with a tap water inlet pipe 7 containing a valve, and a service water pipe 8 disposed at its lower part. An overflow pipe 9 is ~~communicated in communication~~ with the upper part of the service water storage room 4. A water level pipe 10 is ~~communicated in communication~~ with the overflow pipe 9 and the service water pipe 8. A movable plastic tube 11 containing purifying agents, ~~the-quartz grits bags~~ 19, and a

separating supporting frame 12 are disposed at the outlet. One end of the water pipe 13 connected with the inlet extends through the movable separating supporting frame 12 into the bottom of the storage room. A sewage-draining valve 20 is arranged at the bottom. On either side of the valve 20 is disposed an inclined foam concrete-filled temperature-preserving layer 21, whose surface is covered with a thin stainless steel plate 16. A through hole 17 is disposed at the lower part of the wall between the service water storage room 4 and the potable water storage room 5 to connect the two rooms. A movable plastic tube-supporting frame 18 is disposed in the potable water storage room 5, with the quartz grits bags 19 arranged thereon. ~~On either side of the sewage draining valve 20 at the bottom of the room is disposed an inclined foam concrete-filled temperature-preserving layer 21, whose surface is covered with a thin stainless steel plate 22.~~ An ozone inflating tube 24, ~~whose~~having one end is ~~communicated~~in communication with an ozone generator 23, extends through the service water storage room 4 into the bottom of the movable plastic tube in the potable water storage room 5, ~~and an~~ An ozone branch inflating tube 25 communicating with the ozone inflating tube 24 extends to the outlet at the bottom of the movable plastic tube and the separating supporting frame 12. In the upper part of the potable water storage room 5 are disposed a potable water outlet ~~25~~22, an outlet 26 connecting with a solar water heater, and a timed and electrically-controlled valve 27 for the returned circulating purified water.--

Please amend the paragraph beginning on page 15, line 21 as follows.

--Referring now to Figs. 3 and 4, ~~The~~the wall cover of the water supply tank 1 and the water pipe wall are composed respectively of a stainless steel plate 28, a micro electrically-heated temperature-preserving layer 29, a temperature-preserving foam concrete layer ~~20~~30, a polymer foam plate 31, and a temperature-preserving light-reflecting surface film, which are connected in succession. The micro electrically-heated temperature-preserving layer 29 includes a heat-isolating film 33, a 36V micro electrically-heated film or plate 34, and an insulating film 35, the micro electrically-heated temperature-preserving layer being connected with a temperature-sensitive relay switch 36. A decorative safeguarding fence 37 is provided outside the water supply tank 1.--

Please amend the paragraph beginning on page 16, line 9 as follows.

--The second embodiment of the present invention is referred to in Fig. 7. The invention utilizes the water tank of ~~Embodiment 1~~the first embodiment. In the purified water storage room, the timed and electrically-controlled valve 27 has a returned circulating purified water pipe 38. The solar water heater is connected with a temperature-preserving hot water pot 39, which is again connected with a branch hot water pipe 40 to various households. The sewage drained from the sewage draining valve 20 can be processed into neutral water after being deposited and filtered in a sewage pool 41 and a depositing pool 42, the neutral water flows then into a neutral water

storage tank 50 ~~communicated~~in communication with an underground neutral water pool for circulation and recycling. The potable water from the potable water outlet 22 goes through a potable water pipe 43 and a multi-stage filtering cylinder assembly 44 and enters a purified branch pipe 53 for users, where it is divided into two groups, one group bypassing ~~the~~a main branch pipe 54 to household users.--

Please amend the paragraph beginning on page 16, line 21 as follows.

--Fig.8 shows the main branch pipe 54 and the bypassed water flowing into a household pipe 56 connected with a sealed water storage pot which can be switched on by household users (volume:20-30 liter). The bypassed water flow goes through a household remote automatic purified-water meter and a valve, and can be used by the users. Another bypassed flow enters a purified water filtering assembly through a branch pipe 55, where it is processed into pure water for ~~the~~ use in industrial production. The system according to the invention can also be used as equipment for seawater desalination. The sewage drained from the filtering cylinder assembly of the multi-stage filtering cylinder assembly 44 is concentrated in ~~at~~the sewage pool 41 for further processing. The returned water flows through a backwater pipe 45 and returns into a ~~backwater pipe~~the circulating water purified pipe 38 after being activated by a pump 46 and the timed electrically-controlled valve 27. A collecting tray 47 is disposed below the multi-stage filtering cylinder assembly 44; a valve 48 is disposed thereafter on the potable water pipe 43 to let the water in a cleansing pool 49 for cleansing the filter. The sewage produced from the cleansing is then drained

into the sewage pool 41 for processing. When the water storage tank₄ or storage equipment is arranged on the roof, the complementary water supply made up for insufficient water pressure will be provided by a frequency-converting pump 51 through water piping. All the automatic controls of the system are executed in a central console.--

Please amend the paragraph beginning on page 17, line 17 as follows.

--Fig.9 shows the flow chart of the central processing pool for ground surface water and life sewage recycled in residential quarters or ~~Embodiment 3~~the third embodiment according to the invention. ~~Embodiment 3~~The third embodiment utilizes the water supply tank₁ of ~~Embodiment 1~~the first embodiment and the quality-distinguished water processing system of ~~Embodiment 2~~the second embodiment. A ~~two-storey~~two-story central processing pool for life sewage and rainwater is constructed by casting with anti-infiltration reinforced concrete in a suitable area in residential quarters. The pool body is separated into independent processing pools communicated with each other by a base plate 58, a floor plate 59, a top plate 60, a multiplicity of pool walls 61 and separating walls 62, a separating plate pillar 63, and a staircase 90. The ground surface water flows into a rainwater pipe through a sewage fence 64 and is filtered primarily and deposited in a first depositing pool 66. The resulted clear water flows through an overflow hole 67 at the pool separating plate into a buffer pool 68, where it deposits and flows into a fine filtering pool 69 from the lower part of the pool separating plate, and is reboundedly filtered through movable filtering beds 18, 19. When the water level

reaches a float level indicator 70, a console actuates an ozone generator 72, and the ozone flows through the buffer pool 68 to the fine filtering pool 69 and ~~the~~ a neutral water storage pool 75 for disinfection. Meanwhile a super-filtering machine 73 operates to process the water into an up-to-standard neutral water, which flows then through an outlet pipe 74 into ~~a~~the neutral water storage pool 75 at the bottom of the pool for storage. In use of neutral water, a central console 52 actuates a frequency-converting pump 76 to flow the neutral water, through the control of a neutral water-recycling pipe 77 and a bypass valve 89, and connect it with the water piping network in residential buildings for recycling. The residual neutral water can be directly drained into nearby rivers and lakes or underground water-containing layers. ~~The life~~Residential sewage flows into a sewage pipe 78 through ~~a~~the sewage fence 64 to a decomposing pool 79 for decomposition and flows into a buffer pool 81 from the upper part of the pool separating plate after being decomposed and deposited, where it is again deposited and flows into the fine filtering pool 69 through a communicating hole 82 located in the lower part of the pool separating plate, where it is filtered by a rebounded movable filtering bed, disinfected with ozone and super-filtered, and flows then into the neutral water storage pool 75 for storage. The two streams of up-to-standard neutral water are pumped and communicated for recycling. All the ~~dirts~~dirt and sewage deposited at the pool bottom are drained into a sewage draining branch pipe 84 through a sewage draining hole 83 in the middle of an inclined plate, and enter a main pipe 85 whose operation is controlled by a sewage draining pipe valve 86. An inspection opening cover 91 is disposed on the top of the pool, through

which movable filtering beds and facilities in inner pool walls are cleaned and maintained. Water pressure is used to sweep the sewage into a sewage well 87. A slurry pump is dropped through a sewage well mouth into the well bottom to suck the sewage collected at the bottom into a ~~dust~~refuse truck, and the sucked sewage is transported to the suburb refuse dump, where it is processed into fertilizer for crops. The marsh gas generated in the biochemical processing of sewage is controlled by a valve for a drainage and supply pipe 92 at the top of the biochemical processing pool and a marsh gas concentration-controlling valve 93, and is fed through gas supply pipes to households.--